

# **Human CXCL12/SDF-1 Antibody**

Antigen Affinity-purified Polyclonal Goat IgG Catalog Number: AF-310-NA

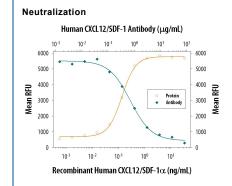
DESCRIPTION			
Species Reactivity	Human		
Specificity	Detects human CXCL12/SDF-1 in direct ELISAs and Western blots.		
Source	Polyclonal Goat IgG		
Purification	Antigen Affinity-purified		
Immunogen	E. coli-derived recombinant human CXCL12/SDF-1α Lys22-Lys89 Accession # Q6ICW0		
Endotoxin Level	<0.10 EU per 1 µg of the antibody by the LAL method.		
Formulation	Lyophilized from a 0.2 µm filtered solution in PBS with Trehalose. See Certificate of Analysis for details.		

### **APPLICATIONS**

Please Note: Optimal dilutions should be determined by each laboratory for each application. General Protocols are available in the Technical Information section on our website.

	Recommended Concentration	Sample
Western Blot	0.1 μg/mL	Recombinant Human/Feline CXCL12/SDF-1β aa 19-93 (Catalog # 2716-SD)
		Recombinant Human/Feline CXCL12/SDF-1β aa 22-93 (Catalog # 351-FS)
		Recombinant Human/Feline/Rhesus Macaque CXCL12/SDF-1α (Catalog # 350-NS)
Neutralization		lity to neutralize CXCL12/SDF-1α-induced chemotaxis in the BaF3 mouse pro-B cell line
	transfected with hum	nan CXCR4. The Neutralization Dose (ND $_{50}$ ) is typically 1.5-6.0 $\mu$ g/mL in the presence of
	2 ng/mL Recombina	int Human/Feline/Rhesus Macague CXCL12/SDF-1α.

#### DATA



Chemotaxis Induced by CXCL12/SDF- $1\alpha$  and Neutralization by Human CXCL12/SDF-1 Antibody. Recombinant Human/Feline/Rhesus Macaque

CXCL12/SDF-1a (Catalog # 350-NS) chemoattracts the BaF3 mouse pro-B cell line transfected with human CXCR4 in a dose-dependent manner (orange line). The amount of cells that migrated through to the lower chemotaxis chamber was measured by Resazurin (Catalog # AR002). Chemotaxis elicited by Recombinant

Human/Feline/Rhesus Macaque CXCL12/SDF-1α (2 ng/mL) is neutralized (green line) by increasing concentrations of Human CXCL12/SDF-1 Antigen Affinity-purified Polyclonal Antibody (Catalog # AF-310-NA). The ND $_{50}$  is typically 1.5-6.0 μg/mL.

## PREPARATION AND STORAGE

Reconstitution	Reconstitute at 0.2 mg/mL in sterile PBS.	
Shipping	The product is shipped at ambient temperature. Upon receipt, store it immediately at the temperature recommended below.	
Stability & Storage	Use a manual defrost freezer and avoid repeated freeze-thaw cycles.  12 months from date of receipt, -20 to -70 °C as supplied.  1 month from date of receipt, 2 to 8 °C, reconstituted.  months from date of receipt, -20 to -70 °C, reconstituted.	

## BACKGROUND

CXCL12, also known as SDF-1 (stromal cell-derived factor 1) and PBSF (Pre-B cell growth stimulatory factor), is a member of the CXC chemokine superfamily. Two alternatively spliced mRNAs encode CXCL12 $\alpha$  (89 aa residues) and CXCL12 $\beta$  (93 aa residues) that differ by the addition of 4 amino acids at the carboxy-terminus. Human and mouse CXCL12 are highly conserved. Mature human and mouse CXCL12 differ only by 1 amino acid.

